

FTA

FEDERAL TRANSIT ADMINISTRATION

Fare Equity Analysis Ridership Data 4702.1B



U.S. Department of Transportation
Federal Transit Administration

Rev. 10/24/12

Overview

- Purpose of fare equity analysis
- Which transit providers must conduct fare equity analyses
- Provide a step-by step example(s) of how to do a fare equity analysis
- Fare equity analysis includes evaluating the effects of fare changes on both minority populations and low-income populations

What is a Fare Equity Analysis

A fare equity analysis is an assessment conducted by a transit provider to determine whether fare changes, either increases or decreases, will result in a disparate impact on Title VI-protected populations



Fare Equity Analysis

- Must be completed by transit providers with 50+ vehicles in peak period in large UZAs
- Applies to all fare and fare media changes
 - Regardless of amount
 - Regardless whether increase or decrease
 - Completed during the planning stage
- Evaluate effect on Title VI-protected populations and low-income populations

Fare Equity Analysis Exceptions

- “Spare the air days”
- Temporary fare reductions that are mitigation measures for other actions
- Promotional fare reductions. If a promotional or temporary fare reduction lasts longer than six months, then FTA considers the fare reduction permanent and the transit provider must conduct a fare equity analysis

Submission

- Fare Equity analyses will be submitted to FTA as part of a transit provider's Title VI program
- Conduct fare equity analysis prior to fare change to determine whether planned changes will have a disparate impact

Technical Assistance

- FTA can provide technical assistance on transit provider's methodology prior to Board Action
- FTA's technical assistance will focus on transit provider's methodology to examine whether the analysis is properly documented
- After Board Approval, FTA will not provide technical assistance

Technical Assistance

- Technical assistance will focus on a transit provider's methodology, to ensure
 - The analysis meets the requirements of the circular
 - The analysis submitted is properly documented – it includes the appropriate charts, tables, and narrative explaining the analysis and the outcome
 - The manner in which the transit provider conducted the fare equity analysis is consistent with the method the transit provider indicated it would use to analyze fare changes.
 - In other words, FTA will review to ensure the transit provider had followed its stated policies and procedures.



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Steps in the Analysis

Requirements and Guidelines



U.S. Department of Transportation
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Fare Equity Analysis Framework

- Evaluate fare impacts on minority and low-income populations separately
- Using the following framework:
 - Develop Disparate Impact Policy and Disproportionate Burden Policy with Public Participation
 - Analyze data
 - Assess Impacts
 - Modify Proposal if Necessary
 - Finding a Disparate Impact
 - Examining Alternatives
 - Finding a Disproportionate Burden

Disparate Impact Definition

- Facially neutral policy or practice that disproportionately affects members of a protected class identified by race, color, or national origin;
- The transit provider's policy or practice lacks a substantial legitimate justification; **and**
- where there exists one or more alternatives that would serve the same legitimate objectives, but with less disproportionate effect on the basis of race, color, or national origin

Sample Disparate Impact Policy

- Fares
- Applied to fare changes consistently, i.e. mathematically consistent throughout the analysis
- Use the Board approved disparate impact policy until next Title VI program submittal
- Disparate Impact Policy Example:
 - Statistical significance is deemed a +/-5% difference between the impacts of the fare changes before and after on minority passengers compared to the impacts borne by non-minority passengers.

Fare Equity Changes: Data Analysis

- Analyze information generated from ridership surveys
- Transit Provider shall:
 - Determine the number and percent of users of each fare media being changed;
 - Review fares before and after the change;
 - Compare the differences for each particular fare; media – minority riders; and
 - Compare the differences for each particular fare media – low-income riders.

Fare change analysis

Presentation and analysis of fare changes.

Count	Cost		Change		Usage by Group		
Fare type	Existing	Proposed	Absolute	Percentage	Low-Income	Minority	Overall
Cash	\$1.50	\$2.00	\$0.50	33.3%	308,287	402,021	451,152
1-Day Pass	\$4.50	\$5.50	\$1.00	22.2%	299,880	290,456	448,907
Senior	\$0.50	\$0.75	\$0.25	50.0%	37,536	17,681	46,077
Disability	\$0.50	\$1.00	\$0.50	100.0%	75,440	29,280	38,600
Adult 31-Day Pass	\$57.00	\$63.00	\$6.00	10.5%	132,720	311,225	746,769
Student 31-Day Pass	\$30.00	\$35.00	\$5.00	16.7%	205,708	192,661	323,150
Adult 7-Day Pass	\$15.00	\$17.00	\$2.00	13.3%	105,831	132,135	170,300
10-Ride Card	\$13.50	\$18.00	\$4.50	33.3%	184	780	11,400
Total					1,165,586	1,376,239	2,236,355

Fare change analysis

Presentation and analysis of fare changes.

% of Total	Cost		Change		Usage by Group		
Fare type	Existing	Proposed	Absolute	Percentage	Low-Income	Minority	Overall
Cash	\$1.50	\$2.00	\$0.50	33.3%	26.4%	29.2%	20.2%
1-Day Pass	\$4.50	\$5.50	\$1.00	22.2%	25.7%	21.1%	20.1%
Senior	\$0.50	\$0.75	\$0.25	50.0%	3.2%	1.3%	2.1%
Disability	\$0.50	\$1.00	\$0.50	100.0%	6.5%	2.1%	1.7%
Adult 31-Day Pass	\$57.00	\$63.00	\$6.00	10.5%	11.4%	22.6%	33.4%
Student 31-Day Pass	\$30.00	\$35.00	\$5.00	16.7%	17.6%	14.0%	14.4%
Adult 7-Day Pass	\$15.00	\$17.00	\$2.00	13.3%	9.1%	9.6%	7.6%
Stored Value Card	\$13.50	\$18.00	\$4.50	33.3%	0.0%	0.1%	0.5%
Total					100.0%	100.0%	100.0%

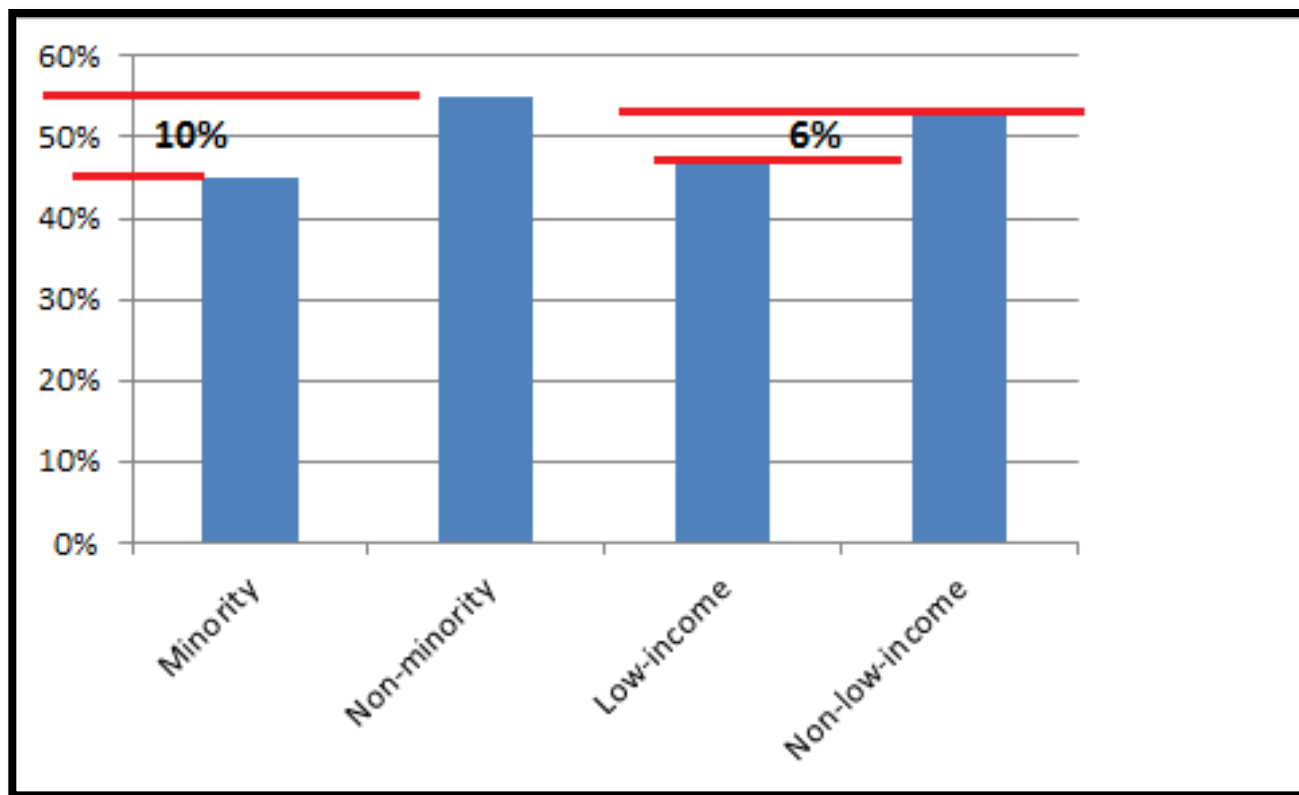
***Disparate Impact Policy &
Disproportionate Burden Policy:
+/-5% comparing ridership to usage***

Calculate Effects of Fare Change on Riders

Proportion of Minority and Low-Income Riders								
Route #	Ridership Information							
	Minority	Percent Minority	Non-minority	Low-Income	Percent Low-Income	Non low-income		
BE 10	70	13%	490	170	26%	480		
BE 18	170	14%	1006	140	12%	1016		
LB 21	460	35%	857	370	30%	866		
LB 11	570	39%	888	300	25%	915		
LB 25	250	40%	377	290	42%	399		
Total	1,520	30%	3,618	1,270	26%	3,676		
Systemwide	210,000	32%	450,000	260,000	39%	400,000		

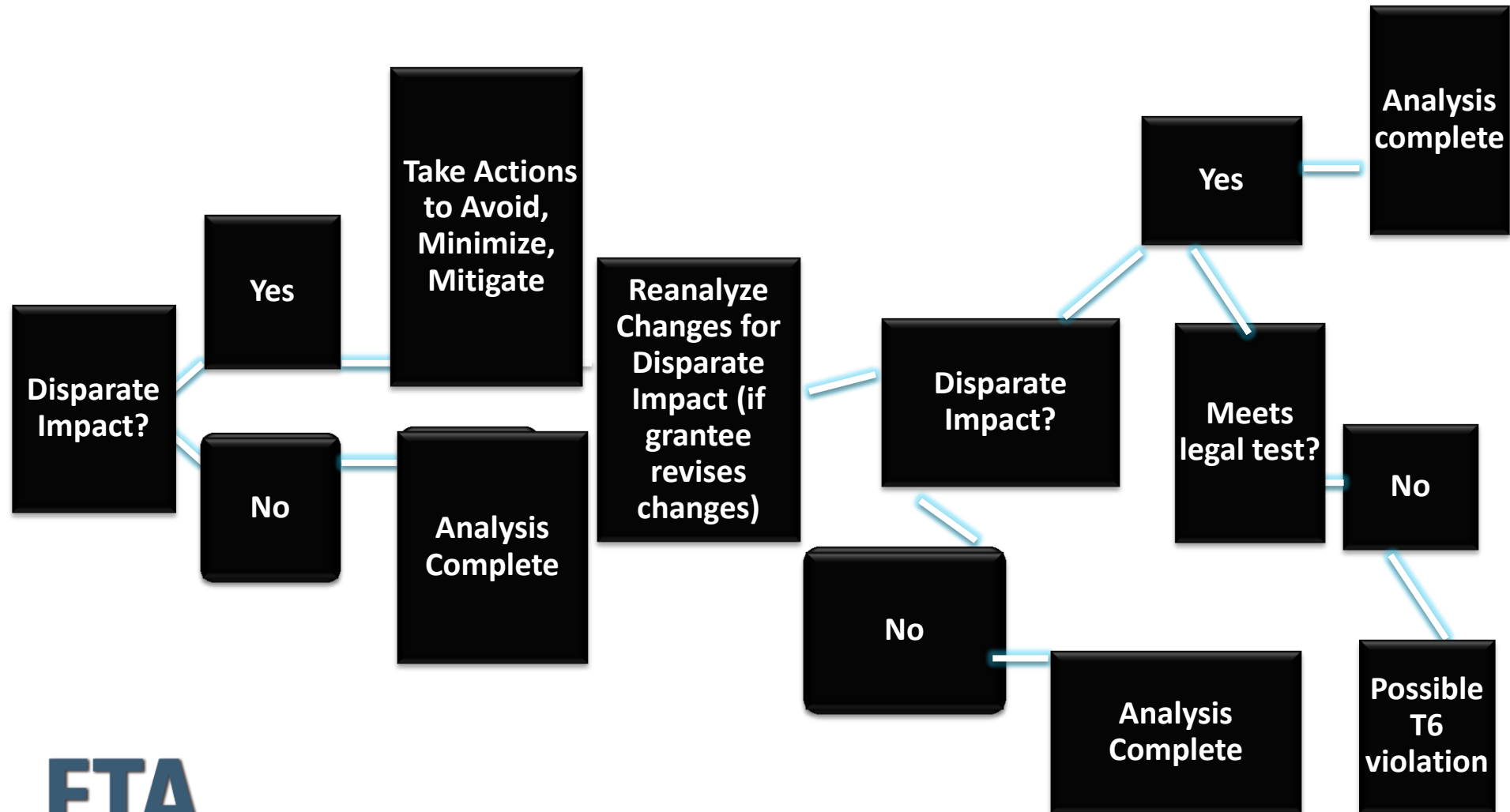
Route #	Fare Information				Average Fare Change			
	Current fare	Proposed fare	Fare change	Percent Fare Change	Minority	Non-minority	Low-income	Non-low-income
BE 10	\$2.00	\$2.50	\$0.50	25%	\$35.00	\$245.00	\$85.00	\$240.00
BE 18	\$2.00	\$2.50	\$0.50	25%	\$85.00	\$503.00	\$70.00	\$508.00
LB 21	\$1.25	\$1.50	\$0.25	20%	\$115.00	\$214.25	\$92.50	\$216.50
LB 11	\$1.25	\$1.50	\$0.25	20%	\$142.50	\$222.00	\$75.00	\$228.75
LB 25	\$1.25	\$1.50	\$0.25	20%	\$62.50	\$94.25	\$72.50	\$99.75
	Average Fare Increase				\$0.29	\$0.35	\$0.31	\$0.35
	Percent Increase				45%	55%	47%	53%

Effects of Fare Changes on Riders



Minority riders and low-income riders will have a lower average fare increase than non-minority and non-low-income households

Steps Taken If Disparate Impact Found



If There is a Potential Disparate Impact

If a disparate impact is found, the transit provider may implement the service change only if:

*“the transit provider (1) has a substantial legitimate justification for the proposed service change; **and** (2) the transit provider can show that there are no alternatives that would have a less disparate impact on minority riders but would still accomplish the transit provider’s legitimate program goals.”*

If There is a Disproportionate Burden

At the conclusion of the analysis, if the transit provider finds that low-income populations will bear a disproportionate burden of the proposed fare change, the transit provider should take steps to avoid, minimize or mitigate impacts where practicable. The transit provider should describe alternatives available to low-income populations affected by the fare changes

Avoid, Minimize and Mitigate

- ✓ Partnerships
- ✓ Subsidy for bulk pass purchases
- ✓ Ticket purchases by CBOs or social service agencies
- ✓ Outreach!



Alternatives Available

- What alternatives are available?
 - ✓ Analyze any alternative transit modes, fare payment types or fare media available for affected people
- Alternative fare media
- Timing of fare increase
- Increase fares on some media
- Studies indicate passengers desire smaller & incremental fare increases; rather than a LARGE ONE all at once

Fare Equity Analysis Recap

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Questions?

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